SUMMARY OF

ACFT INERTIAL NAVIGATION SYS TRNR LRC WORK STA

AUGUST 1998 DEVICE 6E37A

NAVAL AIR WARFARE CENTER TRAINING SYSTEMS DIVISION ORLANDO, FL

TRAINING CATEGORY:

Basic Aircraft Electronics

ORIGINATING AGENCY:

CNO / AIR

SECURITY CLASSIFICATION OF DEVICE:

The Device 6E37A is unclassified.

PURPOSE OF DEVICE:

The Device 6E37A (Learning Resource Center Workstation) Aircraft Inertial Navigation Systems Trainer has been developed to train organizational level, electrical troubleshooting skills associated with basic aircraft navigational and instrumentation systems. The Device 6E37A is a Student self paced training device.

INTENDED USE:

The Device 6E37A (Learning Resource Center Workstation) Aircraft Inertial Navigation Trainer will be used in the training of Aviation Electricians (AE) in theoretical operation and troubleshooting of Inertial Navigation Systems (INS) and Attitude Heading Reference Systems (AHRS) at the following site:

Aviation Electricians (AE) School of the Naval Air Technical Training Center, Pensacola, FL

FUNCTIONAL DESCRIPTION:

The Device 6E37A is designed to facilitate instruction on the cognitive and psycomotor skills necessary to perform the Aviation Electricians Mate job function relevant to the Inertial Navigation Systems and Attitude Heading Reference System. It accomplishes this through Interactive Coarseware technology designed to maximize user flexibility in the selection of activities and exercises.

The Device 6E37A consists entirely of COTS equipment housed in and on a conventional Desktop Workstation and arranged to afford ease of use in the placement of primary controls. A Command Center allows for one step power up and shut down of the device.

The computer system for the Device 6E37A is based on modern, high-integration motherboards that employ the Peripheral Component Interface (PCI) data bus architecture for local and slot-based devices and includes an ISA bus interface for legacy slot-based devices. The Computer System contains a 133 MHz Pentium motherboard with the Intel Triton chipset, 32 MB of RAM, 1.2 GB Hard Drive, 1.5 GB Removable Media Drive, 1.44 Floppy Drive, 24X CD ROM, 20" Color Monitor, Standard Mouse, Keyboard and Trackball.

PHYSICAL INFORMATION:

Each Device 6E37A is 53 inches in width, 24 inches in depth and 50 inches in height. Each unit weighs approximately 200 pounds.

EQUIPMENT REQUIRED (Not Supplied):

None

POWER REQUIREMENTS:

The Device 6E37A requires 120 volt, 60 Hz single phase power. Grounding is in accordance with MIL-T-23991.

INSTALLATION REQUIREMENTS:

The Device desk mounted allowing it to be installed in any location where facility power is accessible. The Device 6E37A has been designed to operate at ambient temperatures between +16°C and +38°C and relative humidity between 30% and 90% non-condensing without performance degradation.

PUBLICATIONS FURNISHED:

The following publications support the Device 6E37A:

A. Operation and Maintenance Manual , Aircraft Inertial Navigation Systems Trainer (Learning Resource Workstation), NAWCTSD P-7365, (U).

B. COTS Manuals, Aircraft Inertial Navigation Systems Trainer (Learning Resource Workstation), NAWCTSD P-7366, (U).

C. Training System Utilization Handbook, Aircraft Inertial Navigation Systems Trainer (Learning Resource Workstation), NAWCTSD P-7367, (U).

PERSONNEL REQUIREMENTS:

Students should be, at a minimum, apprentice technicians with sound basic knowledge of electronic theory and troubleshooting techniques with some experience in maintaining electronic systems.

CONTRACT IDENTIFICATION:

Manufactured by American Systems Corporation , Winter Park, Florida under NAVAIRWARCENTRASYSDIV Contract Number N61339-97-C-0050.